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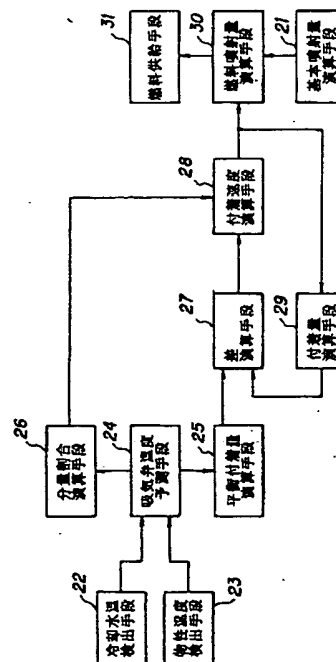
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(54) 【発明の名称】 エンジンの空燃比制御装置

(57) 【要約】

【課題】 ホットリスタート時においても空燃比を一定に保つ。

【解決手段】 冷却水温を検出手段22が、またこの冷却水温と上昇や下降の特性が異なる物性温度を検出手段23がそれぞれ検出し、この物性温度と前記冷却水温から吸気弁温度を予測手段24が予測する。この吸気弁予測温度に基づいて平衡付着量Mfhを演算手段25が、またこの吸気弁温度に基づいて分量割合Kmfを演算手段26がそれぞれ演算する。演算された平衡付着量Mfhとその時点での付着量Mfとの差(Mfh-Mf)と演算された分量割合Kmfとに基づいて付着速度Vm fを演算手段28が演算し、この付着速度Vm fと前記付着量Mfとを燃料噴射に同期して加算することにより付着量Mfを更新手段29が更新する。付着速度Vm fで基本噴射量Tpを補正して燃料噴射量Tiを演算手段30が演算する。



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## AIR-FUEL RATIO CONTROL DEVICE FOR ENGINE

Patent Number: JP9177578  
Publication date: 1997-07-08  
Inventor(s): TAKEYAMA SATORU; NAKAJIMA YUKI  
Applicant(s): NISSAN MOTOR CO LTD  
Requested Patent: ☐ JP9177578  
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Priority Number(s):  
IPC Classification: F02D41/04; F02D45/00; F02M69/00; F02M69/04  
EC Classification:  
Equivalents:

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### Abstract

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**PROBLEM TO BE SOLVED:** To keep air-fuel ratio constant even in hot restarting.

**SOLUTION:** Cooling water temperature and a physical property temperature differed in rising and falling characteristics from the cooling water temperature are detected by a detecting means 22 and a detecting means 23, respectively, and an intake valve temperature is predicted by a predicting means 24 from the physical property temperature and the cooling water temperature. An equilibrated adhesion amount Mfh and a quantity ratio Kmf are calculated by an arithmetic means 25 on the basis of the intake valve predicted temperature, and by an arithmetic means 26 on the basis of the intake valve temperature, respectively. An adhesion speed Vmf is calculated by an arithmetic means 28 on the basis of the calculated equilibrated adhesion Mfh, the difference from the adhesion Mf at that time (Mfh-Mf), and the calculated quantity ratio Kmf, and the adhesion speed Vmf and the adhesion Mf are added synchronously with fuel injection, whereby the adhesion Mf is renewed by a renewing means 29. A basic injection quantity Tp is corrected with the adhesion speed Vmf, and a fuel injection quantity Ti is calculated by an arithmetic means 30.

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